

COMMUNICATIONS SYSTEMS FOR AIRCRAFT

ABSTRACT

A system for permitting passengers on board an aircraft to send and receive electronic data is described. The components of the system on board the aircraft include a server having a plurality of nodes to which computer terminals are attached, as desired. The computer terminals are laptop or palm-top personal computers belonging to the various passengers on board or fixed terminals within the aircraft. The server communicates with a wide variety of different terminals running different operating systems. Each computer terminal is connected to the server via an aircraft network. Server has mass storage which contains a database of WWW pages which can be browsed by passengers using terminals. Server provides a domain name server (DNS) that masquerades as the passenger's usual DNS. Server then links the passenger to the appropriate locally stored WWW page. Server also contains storage for e-mail messages. Connected to server is one or more radios. This permits data to be transferred to base station using communications network. A virtual private network (VPN) connects station to communications service provider networks, web content processor, and via links to the Internet, including access to subscriber ISPs/corporate mail servers and other mail servers. Points of Presence (POP) provide Internet access and e-mail service to subscribers of the service while not on the aircraft. POPs can also be used by communications service provider networks and web content processors as an alternate means to connect to VPN.